REMARKS/ARGUMENTS

The claims have been amended as set forth above. The spacing associated with the claims has been changed for readability. The change with regard to the spacing was only implemented to ease readability for prosecution and not meant to impart any limitations to the claims. No new matter has been added.

I. Rejection under 35 U.S.C. 112, second paragraph

Claims 40, 41, 46, and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. The Office Action asserts that the term "BM25" is not defined by the claim language which renders the claim indefinite. The Office Action also asserts that the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicants respectfully disagree. The BM25 ranking formula is well known in the art. The specification recites that "[o]ne specific implementation is based on the BM25 ranking formula (see e.g., Robertson, S.E., Walker, S., Beaulieu, M.M., Gatford, M., Payne, A. (1995): Okapi at TREC-4, in NIST Special Publication 500-236: The Fourth Text Retrieval Conference (TREC-4): 73-96)." Accordingly, applicants request removal of the rejection and an indication of the allowability of claims 40, 41, 46, and 47.

II. Rejection under 35 U.S.C. 102(b)

Claims 1-39, 42-45, and 48-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Brin et al. "*The Anatomy of a Large-Scale Hypertextual Web Search Engine*," Sergey Brin and Lawrence Page, Stanford University, Stanford, CA, April 14, 1998 (hereinafter "Brin"). Applicants respectfully disagree. Independent claim 1 includes the following combination of features that are not taught or suggested by the cited reference:

> ***replicating each field of the document*** in accordance with a ***field weight*** corresponding to the field to produce ***an individual field set*** corresponding to each field in the document;
>
> combining each field set for the document into ***a virtual document***;

indexing the virtual document to produce a virtual document statistics; and

computing the field-weighted score from the virtual document index based on the query.

Applicants point Examiner Colan to FIGURE 2 and the associated text of the current application for background. Applicants assert that Brin does not teach or otherwise suggest the above combination of features. Brin is the academic paper that seeded Google. Brin teaches a PageRank calculation for a search. The PageRank calculation is an algorithm for ranking a page in a database so that when a user searches a database the most relevant pages are returned. PageRank is an attempt at an objective measure of a pages citation importance. *Brin*, at section 2.1. PageRank takes into account how many pages link or point to the page of interest. For example, a page may have a high PageRank if several pages link or point to the page. *Brin*, at section 2.1. The PageRank is a measure of the significance of the page in a search.

Brin identifies Anchor Text as text of links in a page. For the search engine, Brin associates the text of the link with the page that the link is on and the page that the link points to. Through the double association, searches can be ran for non-text items that are not identified by a web crawler and the accuracy of the search is increased. Here, Brin is teaching calculating a citation importance for a page through a PageRank and using anchor text to improve the accuracy of a search. For example, a user may input a very general search such as "Bill Clinton." The search engine will produce search results that include pages which have a high PageRank (e.g. have been cited to by other documents).

Brin also teaches that "a hit list corresponds to a list of occurrences of a particular word in a particular document including position, font, and capitalization information. *Brin*, at section 4.2.5. Brin teaches two types of hits that include fancy hits and plain hits. *Brin*, at section 4.2.5. Fancy hits include hits occurring in a URL, title, anchor text, or meta tag. *Brin*, at section 4.2.5. Plain hits include everything else. *Brin*, at section 4.2.5. The two types of hits are used during the ranking of the documents. Brin teaches that "Google considers each hit to be one of several different types (title, anchor, URL, plain text large font, plain test small font) each having its own type-weight. *Brin*, at section 4.5.1. Here, Brin does teach weighting different attributes during a

search. However, Brin does not teach the combination of claim 1. Brin does not teach "***replicating each field of the document*** in accordance with a ***field weight*** corresponding to the field to produce ***an individual field set*** corresponding to each field in the document." In fact, Brin does not teach the replication of the document. Brin pertains to the document itself. Also, Brin does not teach "a virtual document." Again, Brin pertains to the document itself. A virtual document as recited in claim 1 is never described. As also recited in claim 1, the virtual document is indexed and claim 1 recites "computing the field-weighted score from the virtual document index based on the query." There is no such teaching in Brin. Accordingly applicants assert that claim 1 is allowable over Brin.

Independent claim 9 includes the following combination of features that are not taught or suggested by the cited reference:

> ***replicating each field of the document*** in accordance with a ***field weight*** corresponding to the field to produce ***an individual field set*** corresponding to each field in the document;
>
> combining each field set for the document into ***a virtual document***;
>
> indexing the virtual document to produce a virtual document statistics; and
>
> ***computing the field-weighted score from the virtual document index based on the query***.

Applicants assert that Brin does not teach or otherwise suggest the above combination of features. Brin does not teach "***replicating each field of the document*** in accordance with a ***field weight*** corresponding to the field to produce ***an individual field set*** corresponding to each field in the document." In fact, Brin does not teach the replication of the document. Brin pertain to the document itself. Also, Brin does not teach "a virtual document." Again, Brin pertains to the document itself. A virtual document as recited in claim 9 is never described. As also recited in claim 9, the virtual document is indexed and claim 9 recites "computing the field-weighted score from the virtual document index based on the query." There is no such teaching in Brin. Accordingly applicants assert that claim 9 is allowable over Brin.

Independent claim 17 includes the following combination of features that are not taught or suggested by the cited reference:

determining ***a field-specific term frequency for each field in the document*** for each query term;

weighting each field-specific term frequency according to a field weight designated for the corresponding field to compute a field-weighted term frequency for each query term;

computing a field-weighted document weight ***for each query term based on the field-weighted term frequency*** for each query term; and

computing the field-weighted score ***as a function of the field-weighted document weight of all query terms***.

Applicants assert that Brin does not teach or otherwise suggest the above combination of features. Brin does not teach "a field-specific term frequency for each field in the document." Brin does not address field-specific term frequency for each field. Brin pertains to the number of citations associated with a document to determine the ranking. Also, Brin does not teach "weighting each field-specific term frequency according to a field weight designated for the corresponding field to compute a field-weighted term frequency for each query term." Again, Brin does not teach breaking a document into fields and applying a weight to each of the fields to determine the relevance of the document. As such, Brin cannot possibly teach calculating "a field-weighted document weight," and/or "a field-weighted score." Accordingly applicants assert that claim 17 is allowable over Brin.

Independent claim 26 includes the following combination of features that are not taught or suggested by the cited reference:

determining ***a field-specific term frequency for each field in the document for each query term***;

weighting each field-specific term frequency according to a field weight designated for the corresponding field to compute a field-weighted term frequency for each query term;

computing ***a field-weighted document weight for each query term*** based on the field-weighted term frequency for each query term; and

computing ***the field-weighted score*** as a function of the field-weighted document weight of all query terms.

Applicants assert that Brin does not teach or otherwise suggest the above combination of features. Brin does not teach "a field-specific term frequency for each field in the document." Brin does not address field-specific term frequency for each field. Brin pertains to the number of citations associated with a document to determine the ranking. Also, Brin does not teach "weighting each field-specific term frequency according to a field weight designated for the corresponding field to compute a field-weighted term frequency for each query term." Again, Brin does not teach breaking a document into fields and applying a weight to each of the fields to determine the relevance of the document. As such, Brin cannot possibly teach calculating "a field-weighted document weight," and/or "a field-weighted score." Accordingly applicants assert that claim 26 is allowable over Brin.

Independent claim 35 includes the following combination of features that are not taught or suggested by the cited reference:

> ***a field-weighted term frequency calculator that determines a field-specific term frequency for each field in the document for each query term*** and weights each field-specific term frequency according to a field weight identified for the corresponding field to compute a field-weighted term frequency for each query term;
>
> ***a field-weighted document weight calculator*** that computes a field-weighted document weight for each query term based on the field-specific term frequency for each query term; and
>
> ***a document score calculator*** that computes the field-weighted score as a function of the field-weighted document weight of all query terms.

Applicants assert that Brin does not teach or otherwise suggest the above combination of features. Brin does not teach "a field-specific term frequency calculator that determines a field-specific term frequency for each field in the document for each query term." Brin does not address field-specific term frequency for each field. Brin pertains to the number of citations associated with a document to determine the ranking. Brin does not teach breaking a document into fields and applying a weight to each of the fields to determine the relevance of the document. As such, Brin cannot possibly teach "a field-weighted document weight calculator," and/or "a document score calculator." Accordingly applicants assert that claim 35 is allowable over Brin.

Independent claim 38 includes the following combination of features that are not taught or suggested by the cited reference:

> ***computing a field-weighted term frequency for each query term*** based on field weights designated for ***individual fields in the document;***
>
> computing ***a field-weighted document weight for each query term based on the field-weighted term frequency*** for each field in the document; and
>
> ***computing the field-weight score*** as a function of the field-weighted document weights of the query terms.

Applicants assert that Brin does not teach or otherwise suggest the above combination of features. Brin does not teach "computing a field-weighted term frequency for each query term based on field weights designated for individual fields in the document." Brin does not address field-specific term frequency for each field. Brin pertains to the number of citations associated with a document to determine the ranking. Brin does not teach breaking a document into fields and applying a weight to each of the fields to determine the relevance of the document. As such, Brin cannot possibly teach "computing a field-weighted document weight for each query term," and/or "computing the field-weight score." Accordingly applicants assert that claim 38 is allowable over Brin.

Independent claim 44 includes the following combination of features that are not taught or suggested by the cited reference:

> computing ***a field-weighted term frequency for each query term*** based on field weights designated for individual fields in the document;
>
> computing ***a field-weighted document weight for each query term*** based on the field-weighted term frequency for each field in the document; and
>
> ***computing the field-weight score*** as a function of the field-weighted document weights of the query terms.

Applicants assert that Brin does not teach or otherwise suggest the above combination of features. Brin does not teach "computing a field-weighted term frequency for each query term." Brin does not address field-specific term frequency. Brin pertains to the number of citations associated with a document to determine the ranking. Brin does not teach breaking a document

into fields and applying a weight to each of the fields to determine the relevance of the document. As such, Brin cannot possibly teach "computing a field-weighted document weight for each query term," and/or "computing the field-weight score." Accordingly applicants assert that claim 44 is allowable over Brin.

Independent claim 50 includes the following combination of features that are not taught or suggested by the cited reference:

> a field-weighted term frequency calculator that ***computes a field-weighted term frequency for each query term*** based on field weights designated for individual fields in the document;
>
> a field-weighted document weight calculator that **computes a field-weighted document weight for each query term based on the field-weighted term frequency for each field in the document**; and
>
> a search engine that computes ***the field-weighted score*** as a function of the field-weighted document weights of the query terms.

Applicants assert that Brin does not teach or otherwise suggest the above combination of features. Brin does not teach "a field-weighted term frequency calculator that computes a field-weighted term frequency for each query term." Brin does not address field-specific term frequency. Brin pertains to the number of citations associated with a document to determine the ranking. Brin does not teach breaking a document into fields and applying a weight to each of the fields to determine the relevance of the document. As such, Brin cannot possibly teach a "weight calculator that computes a field-weighted document weight for each query term based on the field-weighted term frequency for each field in the document," and/or "the field-weighted score." Accordingly applicants assert that claim 50 is allowable over Brin.

With regard to the dependent claims, they ultimately depend from the independent claims above. As such, they should be found allowable for at least the same reasons stated above.

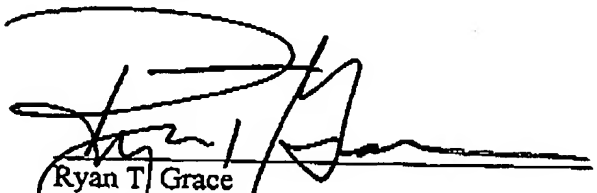
III. Request for Reconsideration

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application,

the Examiner is requested to contact the undersigned attorney for the applicants at the telephone number provided below.

Respectfully submitted,

MERCHANT & GOULD P.C.



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